

Appl. No. 10/559,548
Response to Office Action mailed June 12, 2007

Atty Dkt. No. 114216-028

REMARKS

The non-final Office Action was issued on pending claims 1-8. Claims 1-8 stand rejected. In this Response, claims 1 and 4 have been amended, claims 2, 3, 7 and 8 have been cancelled without prejudice and no claims have been added. Thus, claims 1 and 4-6 are pending in the application.

Applicant invites the Examiner to call Applicant's Representative to discuss any issues with this application.

Claim Rejections – 35 USC §102, §103

At page 2 of the Office Action, claims 1-2 and 5-8 were rejected under 35 U.S.C. §102(b) as being anticipated by Hagmann et al. (US 4,978,046). At pages 2 and 3 of the Office Action, claims 3-4 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hagmann et al. (US 4,978,046). Applicant respectfully disagrees.

Claim 1 has been amended to clarify the claim and to include dependent claims 2 and 3. Accordingly, claims 2 and 3 have been cancelled without prejudice. Claim 4 has been amended to be consistent with the cancellation of claim 3. Claims 7 and 8 have also been cancelled without prejudice.

Amended claim 1 pertains to a button-attaching device 40 comprising:

an upper die 30 for fixing a button 1;

a lower die on which a button coupler to be coupled with the button 1 with a fabric interposed therebetween is disposed;

a button holder 10 for temporarily holding the button 1 and transferring the button 1 held by the button holder 10 to the upper die 30, and

a button holder moving unit for moving the button holder 10 between a button holding position (Fig. 2) for holding the button 1 with the button holder 10 and a button transferring position (Fig. 3) for transferring the button 1 from the button holder 10 to the upper die 30, wherein

Appl. No. 10/559,548
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Atty Dkt. No. 114216-028

the button holder moving unit moves the button holder 10 along a circular trajectory between the button holding position (Fig. 2) and the button transferring position (Fig. 3), the circular trajectory being described around a horizontally-provided rotating shaft 22.

The reference numbers and Figures inserted into the claim text are merely for reference purposes to the examples of Applicant's invention and are not intended to limit the claims.

Referring to Applicant's Figs. 1-3, the button-attaching device 40 has a button holder 10 for temporarily holding a button 1 and transferring the button 1 to an upper die 30. The button-attaching device 40 also has a button holder moving unit (the button holder moving unit has a rotating arm 21, a rotating shaft 22 and a spring 23) for moving the button holder 10 between a button holding position shown in Fig. 2 for holding the button 1 with the button holder 10 and a button transferring position shown in Fig. 3 for transferring the button 1 from the button holder 10 to the upper die 30. The button holder moving unit (rotating arm 21, rotating shaft 22 and spring 23) moves the button holder 10 along a circular trajectory between the button holding position (Fig. 2) and the button transferring position (Fig. 3). The circular trajectory extends around a horizontally-provided rotating shaft 22.

Turning to the §102 rejections based on Hagmann et al., dependent claim 3 was not rejected under §102(b). Claim 1 has been amended to include dependent claim 3 and intervening claim 2. The text of claim 3 added to claim 1 includes "the button holder moving unit moves the button holder along a circular trajectory between the button holding position and the button transferring position." Hagmann et al. simply does not have that claimed structure. Accordingly, the §102(b) rejections should be withdrawn.

Regarding the §103 rejections based on Hagmann et al., Applicant respectfully submits that amended claim 1 is not obvious in view of Hagmann et al. As mentioned above, amended claim 1 calls for "the button holder moving unit moves the button holder along a circular trajectory between the button holding position and the button transferring position, the circular trajectory being described around a horizontally-provided rotating shaft." (emphasis supplied). Hagmann et al. simply does not show, describe or suggest a button holder moving unit which moves a button holder along a circular trajectory around a rotating shaft.

Hagmann et al. pertains to an apparatus for orienting articles in riveting presses and the

Appl. No. 10/559,548
Response to Office Action mailed June 12, 2007

Atty Dkt. No. 114216-028

like. Fig. 1 of Hagmann et al. shows an apparatus having an upper tool 10 and an article transferring device 60 which transfers a discrete article 15 to the upper tool 10. The Hagmann et al. article transferring device 60 slides reciprocally and does not rotate along a circular trajectory around a rotating shaft. The Hagmann et al. transferring device 60 has a slide 64 which reciprocally slides in a guide 66 of the article transferring device 60 and can be reciprocated by a mechanism including a pusher 69. See Hagmann et al., column 12, lines 27-38. Figs. 2 and 3 of Hagmann et al. show the slide 64 in a retracted position slid away from the upper tool 10. See column 12, lines 39-42. Figs. 4-7 of Hagmann et al. show the slide 64 of the article transferring device 60 slid from the retracted position of Figs. 1-3 to an extended position in which the article 15 is positioned by the upper tool 10. An arrow 84 of Fig. 3 shows the direction of the sliding of the slide 64 of the article transferring device 60. See Hagmann et al., column 13, lines 22-36. Therefore, Hagmann et al. has a sliding article transferring device 60 whereas Applicant's button-attaching device, as claimed in claim 1, has a button holder moving unit which moves along a circular trajectory around a rotating shaft. The Office Action at page 3 even acknowledges that Hagmann et al. does not disclose a circular trajectory.

Applicant's button holder moving unit which moves the button holder along a circular trajectory around a rotating shaft is provided for particular reasons. According to Applicant's button-attaching device, the button is transferred to the upper die in an axis direction of the upper die. Also, the button holder is moved outside the lifting path of the upper die so as not to interfere with the lifted upper die. At this time, the button holder is moved in such a manner as to allow an operator to easily observe and check the button surface. Specifically, because Applicant's button-attaching device has a button holder moving unit which moves the button holder along a circular trajectory around a horizontally-provided rotating shaft, the operator can observe the button surface with the orientation of the button being fixed until the button is attached to the upper die (see Fig. 2), thereby ensuring visual observation of the button.

Applicant's button-attaching device having the button holder moving unit which moves the button holder along a circular trajectory around a rotating shaft can provide advantages. According to the present invention, by rotating the button holder moving unit such that the button holder is moved along a circular trajectory around a horizontally-provided rotating shaft, a slight vertical movement of the button holder can be tolerated when the button is transferred

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Atty Dkt. No. 114216-028

from the button holder to the upper die. Also, the button holder can be moved outside of a lifting path of the upper die. See Applicant's specification at page 3, line 28 – page 4, line 14. Again, Hagmann et al. does not disclose or suggest such features.

Furthermore, Applicant's button holder which moves along a circular trajectory around a rotating shaft allows the button to be held by the button holder and attached to the upper die while an operator observes the exposed button surface. Conversely, the Hagmann et al. sliding article transferring device 60 slides the button to the upper tool 10 out of an operator's vision, i.e. the operator can hardly observe the button being attached to the upper tool 10.

Thus, Amended claim 1 is allowable over Hagmann et al. and the §103(a) rejections should be withdrawn. The dependent claims are allowable at least for the same reasons that independent claim 1 is allowable.

CONCLUSION

For the foregoing reasons, Applicant submits that the patent application is in condition for allowance and requests a Notice of Allowance be issued.

Respectfully submitted,

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